IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

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Date Filed:	October 29, 2003
Application Title:	Methods, Compositions And Libraries Pertaining To PNA Dimer and PNA Oligomer Synthesis
Applicants:	Casale et al.
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Examiner:	Unknown
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Respectfully submitted,

Date: March 5, 2004

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FORM PTO

INFORMATION DISCLOSURE STATEMENT

ATTY. DOCKET NO.: BP0206US-CN1
APPLICANT: Casale et. al.
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FILING DATE: 10/29/03
GROUP:

US PATENT DOCUMENTS							
EXAM. INIT.		DOCUMENT NUMBER	DATE	NAME	CLASS	SUB CLASS	FILING DATE IF APPROPRIATE
	AA	4,415,732	Nov. 15, 1983	Caruthers et al.	536	27	Mar. 27, 1981
	AB	4,458,066	July 3, 1984	Caruthers et al.	536	27	Mar. 24, 1981
	AC	4,500,707	Feb. 19, 1985	Caruthers et al.	536	27	Mar. 16, 1982
	AD	4,659,774	April 21, 1987	Webb et al.	525	54.2	Nov. 1, 1985
	AE	4,725,677	Feb. 16, 1988	Köster et al.	536	27	Aug. 10, 1984
	AF	4,786,724	Nov. 22, 1988	Letsinger	536	27	July 25, 1985
	AG	4,923,901	May 8, 1990	Koester et al.	521	53	Sep. 4, 1987
	AH	4,980,460	Dec. 25, 1990	Molko et al.	536	23	Mar. 30, 1987
	AI	5,047,524	Sep. 10, 1991	Andrus et al.	536	27	Dec. 21, 1988
	AJ	5,071,974	Dec. 10, 1991	Groody	536	27	Oct. 31, 1986
	AK	5,112,962	May 12, 1992	Letsinger et al.	536	27	Nov. 9, 1990
	AL	5,164,491	Nov. 17, 1992	Froehler et al.	536	27	June 15, 1989
	AM	5,175,209	Dec. 29, 1992	Beattie et al.	525	54.11	Jan. 31, 1991
	AN	5,188,934	Feb. 23, 1993	Menchen et al.	435	6	Nov. 14, 1989
	AO	5,198,540	Mar. 30, 1993	Koster	536	25.3	June 25, 1984
	AP	5,204,455	April 20, 1993	Froehler et al.	536	22.1	Feb. 10, 1992
	AQ	5,204,456	April 20, 1993	Molko et al.	536	25.33	Sept. 20, 1990
	AR	5,218,103	June 8, 1993	Caruthers et al.	536	25.33	Jan. 22, 1991
	AS	5,243,038	Sept. 7, 1993	Ferrari et al.	536	2301	Oct. 29, 1987
	AT	5,262,530	Nov. 16, 1993	Andrus et al.	536	25.31	July 27, 1990
	AU	5,278,302	Jan. 11, 1994	Caruthers et al.	536	24.5	Nov. 18, 1991
	AV	5,281,701	Jan. 25, 1994	Vinayak	536	25.34	July 12, 1991
	AW	5,348,868	Sept. 20, 1994	Reddy et al.	435	91.1	April 24, 1992
	AX	5,366,860	Nov. 22, 1994	Bergot et al.	435	6	Sept. 29, 1989
	AY	5,380,833	Jan. 10, 1995	Urdea	536	22.1	Dec. 13, 1991
	AZ	5,391,667	Feb. 21, 1995	Dellinger	526	264	Mar. 4, 1993
	AAA	5,391,723	Feb. 21, 1995	Priest	536	23.1	Feb. 16, 1993
	AAB	5,419,966	May 30, 1995	Reed et al.	428	406	July 12, 1993
	AAC	5,446,137	Aug. 29, 1995	Maag et al.	536	23.1	Dec. 9, 1993
	AAD	5,453,496	Sept. 26, 1995	Caruthers et. al.	536	24.5	Oct. 15, 1993
	AAE	5,476,925	Dec. 19, 1995	Letsinger et al.	536	23.1	Jan. 23, 1995
	AAF	5,539,082	July 23, 1996	Nielsen et al.	530	300	April 26, 1993
	AAG	5,527,675	June 18, 1996	Coull et al.	435	6	Aug. 20, 1993
	AAH	5,623,049	April 22, 1997	Löbberding et al.	530	300	Sep. 6, 1994
	AAI	5,714,331	Feb. 3, 1998	Buchardt et al.	435	6	Jul. 24, 1996
	AAJ	5,736,336	April 7, 1998	Buchardt et al.	435	6	May 1, 1997
	AAK	5,766,855	June 16, 1998	Buchardt et al.	435	6	July 24, 1996
	AAL	5,773,571	June 30, 1998	Nielsen et al	530	300	Feb. 1, 1996
	AAM	5,786,461	July 28, 1998	Buchardt et al.	536	18.7	May 1, 1997
	AAN	5,837,459	Nov. 17, 1998	Berg et al.	435	6	May 24, 1996
	AAO	5,847,162	Dec. 8, 1998	Lee et al.	549	227	June 27, 1996
	AAP	5,891,625	April 6, 1999	Buchardt et al.	435	6	June 7, 1993
	AAQ	5,936,087	Aug. 10, 1999	Benson et al.	546	33	Nov. 25, 1997
	AAR	5,972,610	Oct. 26, 1999	Buchardt et al.	435	6	Oct. 8, 1997

	AAS	5,986,053	Oct. 26, 1999	Buchardt et al.	435	6	Oct. 8, 1997
	AAT	6,008,379	Dec. 28, 1999	Benson et al.	549	224	Oct. 1, 1997
	AAU	6,020,481	Feb. 1, 2000	Benson et al.	536	26.6	April 1, 1996
	AAV	6,027,893	Feb 22, 2000	Ørum et al.	435	6	Dec. 18, 1997
	AAW	6,051,719	April 18, 2000	Benson et al.	548	416	Nov. 17, 1998
	AAX	6,063,569	May 16, 2000	Gildea et al.	435	6	Aug. 11, 1997
	AAY	6,080,868	June 27, 1000	Lee et al.	548	100	Jan.23, 1998
	AAZ	6,107,470	Aug. 22, 2000	Nielsen et al.	536	23.1	Jan. 4, 1999
	ABA	6,110,676	Aug. 29, 2000	Coull, et al.	435	6	Nov. 3, 1997
	ABB	6,117,986	Sept. 12, 2000	Nardone et al.	534	727	June 10, 1998
	ABC	6,140,500	Oct. 31, 2000	Yan et al.	544	99	Sept. 3, 1999
	ABD	6,191,278	Feb. 20, 2001	Lee et al.	546	41	Nov. 3, 1999
	ABE	6,201,103	Mar. 13, 2001	Nielsen et al.	530	300	Dec. 10, 1998
	ABF	6,228,982	May 8, 2001	Norden et al.	530	300	July 2, 1993
	ABG	6,248,884	June 19, 2001	Lam et al.	544	59	June 3, 1999
	ABH	6,280,964	Aug. 28, 2001	Kavanaugh et al.	435	7.8	April 14, 1995
	ABI	6,355,421	Mar. 12, 2002	Coull et al.	435	6	Oct. 27, 1998
	ABJ	6,357,163	Mar. 19, 2002	Buchardt et al.	43	6	May 22, 1992
	ABK	6,361,942	Mar. 26, 2002	Coull et al.	435	6	Mar. 24, 1999
	ABL	6,441,152	Aug. 27, 2002	Johansen et al.	536	23.1	Dec. 8, 1999

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EXAM. INIT.		DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUB CLASS	TRANSLATION YES	NO
	BA	WO96/04000	Feb. 15, 1996	WIPO				
	BB	WO96/40709	Dec. 19, 1996	WIPO				
	BC	WO97/45539	Dec. 4, 1997	WIPO				
	BD	WO99/21881	May 6, 1999	WIPO				
	BE	WO99/49293	Sept. 30, 1999	WIPO				
	BF	WO01/31063	May 3, 2001	WIPO				

	CA	Altmann, K., et al, " Polyamide Based Nucleic Acid Analogs- Synthesis of d-Amino Acids With Nucleic Acid Bases Bearing Side Chains". **Bioorganic & Medicinal Chemistry Letters**, *7*, 1119-1122 (1997)
	CB	Cantin, M. et al, "Synthesis Of The Monomeric Building Blocks of Z-Olefinic PNA (Z-OPA) Containing The Bases Adenine And Thymine". **Tett. Lett.**, *38*, 4211-4214 (1997)
	CC	Ciapetti, P. et al, " Synthesis of N-Fmoc-a-Amino Acids Carrying The Four DNA Nucleobases In The Side Chain". **Tetrahedron**, *53*, 1167-1176 (1997)
	CD	Diderichsen, U. et al, " Alanyl-PNA Oligomers: A New System For Identification". **Bioorganic & Med. Chem. Lett.**, *7*, 1743-1746 (1997)
	CE	Diderichsen, U. et al, "Alanyl-PNA Homoduplex: A-T Pairig With The N7-Regioisomer Of Adenine". **Bioorganic & Med. Chem. Lett.**, *8*, 165-168 (1998)
	CF	Diderichsen, U. et al, "Self-Pairing PNA With Alternating Alanyl/Homoalanyl Backbone". **Tett. Lett.**, *37*, 475-478 (1996)
	CG	Fujii, M. et al, "Nucleic Acid Analog Peptide (NAAP) 2. Synthesis And Properties Of Novel DNA Analog Peptides Containing Nucleobase Linked ß-Aminoalanine". **Bioorg. Med. Chem. Lett.**. *7*, 637-627 (1997)
	CH	Garman, A.J., "Non-Radioactive Labeling, A Practical Introduction". **Academic Press**, San Diego, CA (1997)
	CI	Gildea, B. et al, "PNA Solubility Enhancers". **Tett. Lett.**, *39*, 7255-7258 (1988)
	CJ	Haaima, G. et al, "Peptide Nucleic Acids (PNAs) Containing Thymine Monomers Derived From Chiral Amino Acids: Hybridization And Solubility Properties Of D-Lysine PNA". **Angew. Chem Int. Ed. Engl**, 35, 1939-1942
	CK	Howarth, N. et al, "a-PNA: A Novel Peptide Nucleic Acid Analogue Of DNA". **J. Org. Chem**, *62*, 5441-5450 (1997)
	CL	Jordan, S. et al, " New Hetero-Oligomeric Peptide Nucleic Acids With Improved Binding Properties To Complementary DNA". **Bioorg. Med. Chem. Lett.**, *7*, 687-690 (1997)
	CM	Krotz, A. et al, "Synthesis of 'Retro-Inverso' Peptide Nucleic Acids: 2. Oligomerization And Stability". **Tett. Lett.**, *36*, 6941-6944 (1995)
	CN	Kumar, V. et al, " Pyrrolidine Nucleic Acids: DNA/PNA Oligomers With 2-Hydroxy/Aminomethyl- 4-(thymin-1-yl) Pyrrolidine-N-Acetic Acid". **Organic Letters**, *3* (9), 1269-1272 (2001)
	CO	Lagriffoul, P.et al, " The Synthesis, Co-Oligomerization And Hybridization Of A Thymine-Thymine Heterodimer Containing PNA". **Bioorganic & Medicinal Chemistry Letters**, *4*, 1081-1082 (1994)

	CP	Lagriffoul, P. et al, "Peptide Nucleic Acids With A Conformationally Constrained Chiral Cyclohexyl-Derived Backbone". **Chem. Eur. J.**, *3*, 912-919 (1997)
	CQ	Lowe, G. et al, "Amino Acids Bearing Nucleobases For The Synthesis Of Novel Peptide Nucleic Acids". **J. Chem. Soc. Perkin Trans.**, *1*, 539-546 (1997)
	CR	Lowe, G. et al, "Dipeptides Bearing Nucleobases For The Synthesis Of Novel Peptide Nucleic Acids". **J. Chem. Soc. Perkin Trans.**, *11*, 547-554 (1997)
	CS	Lowe, G. et al, "Solid-Phase Synthesis Of Novel Peptide Nucleic Acids". **J. Chem. Soc. Perkin Trans.**, *11*, 555-560 (1997)
	CT	Petersen, K. et al, "Synthesis And Oligomerization of N^{d}-Noc-N^{a}–(thymine-1-ylacetyl)ornithine". **Bioorganic & Medicinal Chemistry Letters**, *6*, 793-796 (1996)
	CU	Seela, et al, **Nucl. Acids, Res.**, 28, 3224-3232 (2000)
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	CW	Uhlmann, E. et al., "PNA: Synthetic Polyamide Nucleic Acids With Unusual Binding Properties". **Angew. Chem. Int. Ed.** *37*, 2796-2823 (1998)